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(54) **Title**: TWO STAGE CATEGORIZATION OF OBJECTS IN IMAGES

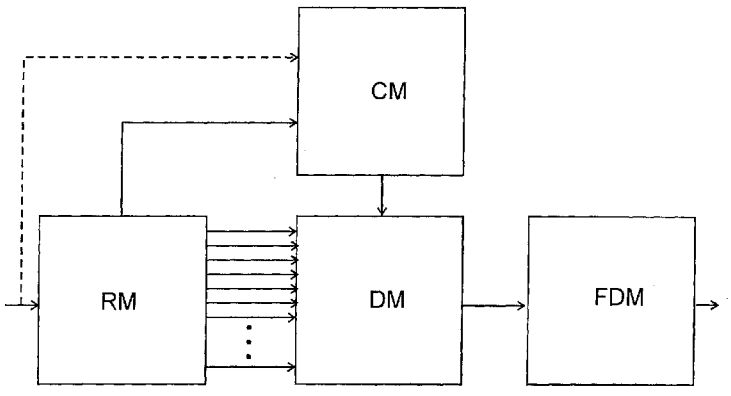

Fig. 4

(57) **Abstract**: The invention is an image processing method and an apparatus for automatic categorisation of elements in an image of a body fluid sample, the apparatus comprising - a recognition module (RM) for generating probability maps associated with each category on the basis of visual information appearing in the image, the probability map showing presence probability distribution of the element of the given category, and - a decision module (DM) for providing information about the presence of elements of the categories on the basis of an analysis of the probability maps. The apparatus according to the invention furthermore comprises - a calling module (CM) for locating presumably present elements in the image (10) and calling the decision module (DM) regarding each presumably present element, and - the decision module (DM) is adapted for taking into account, in examining the presence of the element, at least one further probability map other than the probability map (11) associated with the category of the element.

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A. CLASSIFICATION OF SUBJECT MATTER
INV. G06K9/00 G06K9/46 G06K9/62 G06K9/80
ADD.

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
G06K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	BARBANO P E ET AL: "Toward Automatic Phenotyping of Developing Embryos From Videos", IEEE TRANSACTIONS ON IMAGE PROCESSING, IEEE SERVICE CENTER, PISCATAWAY, NJ, US, vol. 14, no. 9, 1 September 2005 (2005-09-01), pages 1360-1371, XP011137594, ISSN: 1057-7149, DOI: 10.1109/TIP.2005.852470	1,2,10, 12,13, 15-18, 20,21
Y	the whole document	3-9,11, 14,19,22

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[X] Further documents are listed in the continuation of Box C.

[X] See patent family annex.

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C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

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